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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/169,023	10/08/1998	IVAN YANG	0100.01272	5153
23418 7590 10/21/2003 VEDDER PRICE KAUFMAN & KAMMHOLZ 222 N. LASALLE STREET CHICAGO, IL 60601			EXAMINER BUI, KIEU OANH T	
			ART UNIT	PAPER NUMBER
			2611	14
DATE MAILED: 10/21/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/169,023

Applicant(s)

YANG ET AL.

Examiner

KIEU-OANH T BUI

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

2. Claims 1-2, 4-8, 10-14, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwoh et al (U.S. Patent 6,115,057/ or “Kwoh”) in view of Ming et al. (U.S. Patent No. 5,710,815/ or “Ming” hereinafter) and Chapman et al (US Patent No. 6,216,228 B1).

Regarding claim 1, Kwoh discloses a method for controlling display of content signals (col. 2/lines 6-26), the method comprises the steps of:

- a) receiving a content signal that includes at least one of video, audio, and text content and at least one associated content control indicator, i.e., a content rating level control indicator is associated with at least one of video, audio, and text content at the step of receiving a content signal (Figs. 23-25, and col. 15/line 53 to col. 16/line 6; and col. 16/line 66 to col. 17/line 31);
- b) comparing the at least one associated content control indicator with at least one content control setting (Fig. 31A/step 912, and col. 19/lines 9-36); when the at least one associated content control indicator compares unfavorably to the at least one content control setting, i.e., at least one associated control indicator or content rating level control shows the unfavorable indication, e.g., a restricted program (Fig. 31A/ step 914; and col. 19/lines 9-36).

Kwoh shows to block selected programs based on their ratings (col. 3/line 53 to col. 4/line 16), but Kwoh does not show the steps of “c) scrambling at least a portion of the at least one of video, audio, and text content to produce scrambled content; and d) providing the scrambled content to a content rendering device”; however, Ming teaches an exact same technique in rating controls as the user can control the display of viewing programs by scrambling at least a portion of the programs with a scramble control unit 118 within a receiving decoder such that the scrambled video and audio signals can be provided at the content rendering device (Fig. 2/item 118 & Fig. 3, col. 7/line 30 to col. 8/line 63 for an example of this concerned issue & col. 21/lines 10-25; and col. 13/line 1-61). In addition, Chapman teaches a video/audio decoder that can prevent to display an unsuitable content to viewer by scrambling only a portion of program, not an entire program before displaying it to users/viewers (Chapman, col. 4/lines 40-55, and col. 9/lines 19-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kwoh’s rating control system with Ming’s regulation of scrambling the video/audio signals of television viewing content based on the scramble control signal embedded in each channel (as illustrated in Fig. 25 of Ming) and the teaching technique of Chapman for scrambling only a portion of programs before displaying them to viewers in order to scramble at least a portion of the at least one of video, audio, and text content to produce scrambled content and providing the scrambled content to a content rendering device. The motivation for doing this is to offer alternative choices in selecting restrictive programs as suggested by Ming, i.e., precluding the receipt of programming content which corresponds to the user’s preset categories based on the user’s preferences (Ming, col. 2/lines 10-50) and Chapman’s preventing technique to view unsuitable materials by scrambling only a portion of programs as taught by Chapman.

As for claims 2, 8 and 14, in further view of claim 1 above, Ming and Chapman further discloses the steps comprises “scrambling at least a portion of the audio content to produce scrambled audio content, wherein the content signal includes the audio content; and providing the scrambled audio content to an audio rendering device”, i.e., audio signals are scrambled (Ming, col. 13/lines 24-44 & Chapman, col. 4/lines 40-55).

As for claim 4, in view of claim 1 above, Kwoh shows “scrambling the text content to produce scrambled text content, wherein the content signal includes the text content; and providing the scrambled text content to a display” because the text content is included in the television signal for scrambling (col. 12/line 63 to col. 13/line 5; col. 14/lines 7-30; and col. 14/line 66 to col. 15/line 45).

As for claim 5, in view of claim 1 above, Kwoh shows the step of “interpreting the at least one associated content control indicator to determine copy restriction status; and when copy restriction is enabled, preventing copying of the content signal”, i.e., disabling or blocking a program as unfavorable program is set to be restricted; or in other words, the viewer is prevented from copying the content signal (col. 1/line 63 to col. 2/line 26) with the control menu (as illustrated in Fig. 11).

As for claim 6, in further view of claim 1 above, Kwoh further shows “comprises providing an audio scrambling signal to an audio processing module when the at least one associated content control indicator compares unfavorably to the at least one content control setting”, i.e., audio content such as language is part of audio portions can be controlled for blocking (Kwoh, col. 9/lines 5-15) and/or scrambling (by Ming, see claim 1, & Chapman, col. 4/lines 40-55)).

Regarding claim 7, Kwoh discloses a content controller comprises: a processing module (Fig. 5/item 80) ; and memory operably coupled to the processing module, i.e., a parental control memory (Fig. 5/item 84), wherein the memory stores operational instructions that cause the processing module to (a) receive a content signal that includes at least one of video, audio, and text content and at least one associated content control indicator; (b) compare the at least one associated content control indicator with at least one content control setting; when the at least one associated content control indicator compares unfavorably to the at least one content control setting (as illustrated in Fig. 5 for a memory storing control setting; and further in Fig. 6, and col. 6/line 19-col. 8/line 17 for detailed steps in controlling the setting based on rating control indicators).

Kwoh does not further show the steps of “(c) scramble at least a portion of the at least one of video, audio, and text content to produce scrambled content; and (d) provide the scrambled content to a content rendering device”; however, Ming teaches an exact same technique in rating controls as the user can control the display of viewing programs by scrambling at least a portion of the programs with a scramble control unit 118 within a receiving decoder such that the scrambled video and audio signals can be provided at the content rendering device (Fig. 2/item 118 & Fig. 3, and col. 13/line 1-61; and col. 7/line 30 to col. 8/line 63 & col. 21/lines 10-25 for an example of this concerned issue). In addition, Chapman teaches a video/audio decoder that can prevent to display an unsuitable content to viewer by scrambling only a portion of program, not an entire program before displaying it to users/viewers (Chapman, col. 4/lines 40-55, and col. 9/lines 19-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kwoh’s rating control system with Ming’s regulation of scrambling the video/audio signals of television viewing content based on the scramble control

Art Unit: 2611

signal embedded in each channel (as illustrated in Fig. 25 of Ming) and the teaching technique of Chapman for scrambling only a portion of programs before displaying them to viewers in order to scramble at least a portion of the at least one of video, audio, and text content to produce scrambled content and providing the scrambled content to a content rendering device. The motivation for doing this is to offer alternative choices in selecting restrictive programs as suggested by Ming, i.e., precluding the receipt of programming content which corresponds to the user's preset categories based on the user's preferences (col. 2/lines 10-50) and Chapman's preventing technique to view unsuitable materials by scrambling only a portion of programs as taught by Chapman. .

As for claims 10-12, these claims for the steps of "wherein the memory further comprises operational instructions that cause the processing module to scramble at least a portion of the text content to produce scrambled text content, wherein the content signal includes the text content; and provide the scrambled text content to the display"; "wherein the memory further comprises operational instructions that cause the processing module to interpret the at least one associated content control indicator to determine copy restriction status; and when copy restriction is enabled, preventing copying of the content signal"; and "wherein the memory further comprises operational instructions that cause the processing module to provide an audio scrambling signal to an audio processing module when the at least one associated content control indicator compares unfavorably to the at least one content control setting" are rejected for the reasons given in the scope of claims 4-6 as already discussed in details above.

Regarding claim 13, Kwoh discloses a video device (Fig. 18) comprises:  
a tuner operably coupled to receive a content signal and to produce, therefrom, a digitized content signal (Fig. 18/item 438 or Fig. 25/ item 70 with digitized content signal in col. 15/line 30 to col. 16/line 6);

a video decoder operably coupled to receive the digitized content signal and to produce, therefrom, decoded video (as illustrated in Fig. 25 with an EDS decoder 710) ;

a graphics controller operably coupled to receive the decoded video and to provide, therefrom, a video output, i.e., a video circuit 440 for controlling and outputting video to monitor 442 (Fig. 18), wherein the graphics controller includes:

a processing module; and memory operably coupled to the processing module, wherein the memory stores operational instructions that cause the processing module to (a) monitor at least one of the content signal, the digitized content signal, the decoded video, and the video output, wherein the at least one of the content signal, the digitized content signal, the decoded video, and the video output includes video content and at least one associated content control indicator; (b) compare the at least one associated content control indicator with at least one content control setting; when the at least one associated content control indicator compares unfavorably to the at least one content control setting c ) control scrambling of at least a portion of the digitized content signal or the decoded video to produce scrambled video content; and (d) provide the scrambled video content as the video output (see claim 7 & Chapman, col. 4/lines 40-55) above).

As for claims 17-19, these claims are rejected for the reasons given in the scope of claims 4-6 as already discussed above.



As for claim 20, in view of claim 13, Kwoh further discloses “at least one of a display and a recorder, wherein the display and the recorder are operably coupled to receive the video output”, i.e., a video cassette recorder or VCR is connected for recording (Fig. 18/item 44 or Fig. 29).

3. Claims 3, 9, 15-16, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwoh et al (U.S. Patent 6,115,057/ or “Kwoh”) in view of Ming et al. (U.S. Patent 5,710,815), Chapman et al (US Patent 6,216,228) and Frederiksen (U.S. Patent 4,605,961). As for claims 3, 9 and 15, in further view of claim 2 above, the combination of Kwok and Ming does not show the issue as claimed; however, Frederiksen teaches an exact same technique in scrambling at least a portion of audio content to produce the scrambled audio content by using an audio scrambler 32 with the help of a random no generator 28 in randomly selecting at least portions of audio contents for scrambling (see Frederiksen, Fig. 1, col. 4/lines 54-63 and Fig. 9, col. 11/line 30 to col. 12/line 37 for segments containing either audio or video contents are scrambled). Frederiksen teaches “comprises attenuating the at least a portion of the audio content to produce the scrambled audio content”, i.e., at least a portion of audio content are sampled and digitized in more delay times and undergoing several processes (col. 16/lines 9-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kwoh and Ming’s system with Frederiksen’s detailed technique in using a separate audio scrambler in scrambling at least a portion of the audio content with the attenuating step as cited.

Application/Control Number: 09/169,023  
Art Unit: 2611

As for claim 16, in view of claim 15 above, Frederiksen reveals to comprise at least one of a scramble module and an attenuation module, i.e., within audio scrambler (Fig. 1/item 32), operably coupled to the audio decoder, i.e., audio digitizer (Fig. 1/item 31).

As for claims 21 and 22, in view of claim 13, the combination of Kwoh, Ming and Frederiksen teaches the steps of "comprising a scramble module operably coupled to scramble, when enabled, the at least a portion of the digitized content signal or the decoded video" and "wherein the graphics control further comprises a scramble module operably coupled to scramble, when enabled, the at least a portion of the digitized content signal or the decoded video" (see claims 1, 4-6 and 2-3 above).

#### *Response to Arguments*

4. Applicant's arguments filed on 07/23/03 have been fully considered but they are not persuasive. Applicants basically argue that Chapman does not teach or suggest the step of "scrambling at least a portion of the at least one of video, audio, and text content to produce scrambled content" as cited in claims 1, 7 and 13, which the Examiner traverses this statement as the Examiner already points out to Chapman's art on col. 4/lines 40-55 in the previous office action. The Examiner believes that this paragraph of Chapman gives a clear cut of reading on the limitations as cited, yet the Applicants still question about it, and conclude that it shows ambiguities within the wording of Chapman. Chapman clearly states that by scrambling the data which is sent, which re-citing "the video or image data having content classifications defined as prohibited" (as one reads this entire paragraph, it clearly reads on the limitations of claims 1, 7 and 13).

In addition, “scrambling” is not novel in the art, and, by Newton’s Telecom 2002 definition, “scrambling” means “traditionally defined in the science of cryptology as an analog method of concealing communication signals which uses the processes of heterodyne, band division, transposition, or signal inversion”. “Heterodyne” simply means mixing two or more signals to generate new frequencies within a non-linear device such as within a converter or a mixer. Understanding this, even the issue raised by the Applicants, by “overlaying the video or image data with blanking data” can still be broadly understood as one of “scrambling processes” for concealing communication signals in order to either not displaying the video data or showing the display with blanking data (the mixing process occurs here or “heterodyne”; otherwise, video data with contents is displaying to the viewer), and/or making the video data can not be suitable for viewing with “an unintelligible picture” as scrambled data (understood) under the scrambling process suggested. Therefore, the Examiner does not agree with the Applicants’ arguments and stands with the teachings of Kwoh, Ming and Chapman as already disclosed in the previous Office Action and discussed in this Final Office Action.

### *Conclusion*

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on

Art Unit: 2611

the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. **Any response to this action should be mailed to:**  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**  
(703) 872-9314, (for Technology Center 2600 only)


*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Krista Bui  
Art Unit 2611  
October 6, 2003

  
ANDREW FAILE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600